

# Appendix G: Current Usage and User Needs Assessment



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# Current Usage and User Needs Assessment

Significant numbers of residents bicycle in Milwaukee on a regular basis. It is clear that the number of cyclists is increasing, and the demand and benefits model presented in Appendix D attempts to quantify the number of people regularly cycling within the city. In October of 2004, the Bike Fed set up infrared counters and performed manual counts on the Oak Leaf Trail near the Brady Street Bridge, as well as in Cupertino Park. Those counts recorded about 30,000 cyclists on the trail. In order to better gauge the number of people riding in Milwaukee, as well as the attitudes of residents toward cycling, two surveys were conducted. These surveys specifically evaluated bicyclist behaviors and attitudes in Milwaukee.

- The Milwaukee Survey of Bicyclist Attitudes and Behaviors was conducted by the Institute for Survey and Policy Research at the University of Wisconsin-Milwaukee. This was a formal survey that is statistically representative of Milwaukee residents and was conducted so as to be comparable to national statistics and surveys.
- The Milwaukee Bike Plan Survey was an informal qualitative survey targeted at existing cyclists in the Milwaukee area to learn about their opinions about bicycling in Milwaukee.
- The American Community Survey is conducted annually by the United States Census Bureau. This data relies heavily on statistical sampling, and therefore is not very precise. However, since the survey is conducted in the same manner each year for different cities, it provides comparable data that is good for trend analysis.



*The Brady Street bicycle and pedestrian bridge connects to a popular path*

When combined with the bicyclist demand and benefits model developed, a clearer picture of current and future bicycle usage in Milwaukee emerges.

## Milwaukee Survey of Bicyclist Attitudes and Behaviors

The 2008 Milwaukee Survey of Bicyclist Attitudes and Behaviors (MSBAB) was sponsored by the City of Milwaukee Department of Public Works and the Wisconsin Bicycle Federation. The survey established benchmark measures of the behavior and attitudes of Milwaukee residents age 16 and over regarding bicycling. Many of the questions used in the survey were drawn from the 2002 National Survey of Pedestrian & Bicyclist Attitudes and Behaviors (NSPBAB) conducted by The Gallup Organization for the U.S. Department of Transportation's National Highway Traffic Safety Administration and the Bureau of Transportation Statistics. By presenting findings from the MSBAB in conjunction with national benchmarks, this survey shows how the sample of Milwaukee city residents compares to a nationally representative sample of individuals 16 years of age and older, with regard to the frequency of bicycling, the reasons for not biking, the distance and purpose of the most recent bike trip, and perceptions of biking safety. The MSBAB also asked city residents, both riders and non-riders, about their attitudes regarding bicycling, including their views on how well their communities are designed to make bike riding safe.

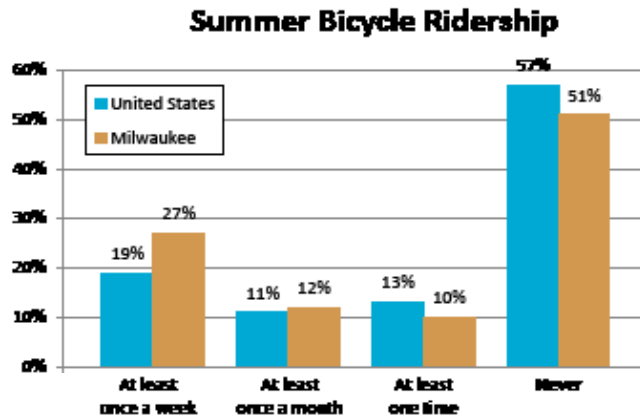
The MSBAB was administered during August 2008, and respondents were asked specifically about the frequency of their bike riding during the summer months (May through September) as well as during the past 30 days. The results of the MSBAB cannot be used to estimate year-round bicycling behavior, but the findings should accurately measure biking activity in Milwaukee during the summer of 2008. Although the size of the survey (434 respondents) does not provide reliable estimates of the frequency of bicycling within neighborhoods, the figures that follow show how the frequency of bike riding varies by gender and age group. The methodology for the survey, including sample selection, response rates, and sampling error, is detailed in Appendix H.

## Frequency of Bicycling

Milwaukee residents ride their bikes more than the national average. Of residents reporting that they had

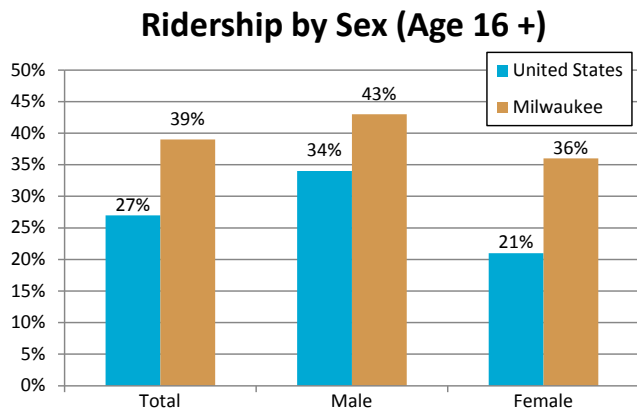
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access to a bicycle, nearly half (49%) reported riding at least once during the summer months, whereas only 43% of people in the national survey reported riding at least once during the summer. Additionally, Milwaukee residents appear to ride more frequently, with 27% reporting they ride at least once a week compared to 19% nationally.



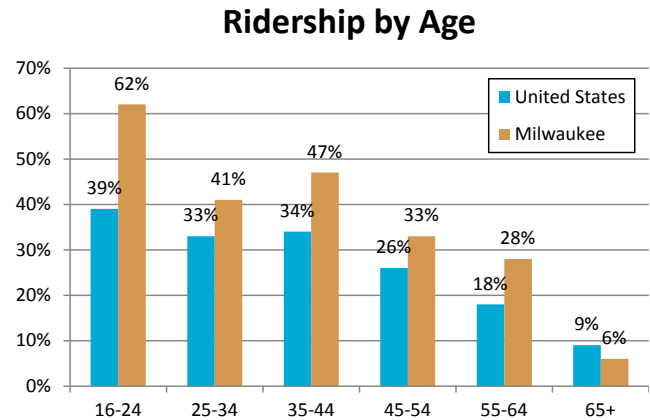
**Figure 5: Frequency of Bicycling Reported by Those with Regular Access to a Bicycle**

When bicycle ridership is examined for those reporting riding in the last 30 days, the differences between Milwaukee and the nation as a whole becomes more apparent. Among riders over 16 years of age, 39% of Milwaukee residents reported riding at least once in the last 30 days, compared to 27% nationally. While males in Milwaukee ride more frequently than males nationally (43% versus 34%), females in Milwaukee ride dramatically more than females nationally (36% versus 21%).



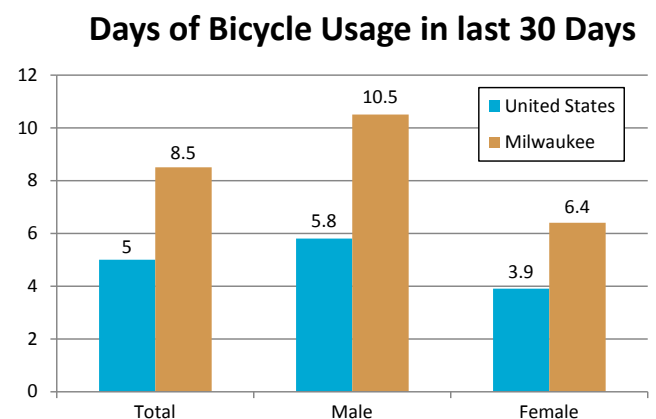
**Figure 6: Bicycle Ridership by Sex**

When looking at ridership by age, Milwaukee residents again beat out their national peers, with considerably higher ridership levels in every age category, other than those 65 years old and older. While not all of these differences are statistically significant, due to relatively small numbers of people in certain age groups, the pattern of higher ridership in Milwaukee is clear.

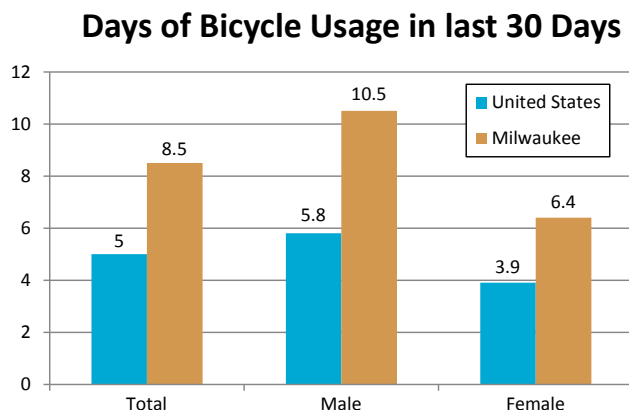


**Figure 7: Bicycle Ridership by Age**

Milwaukee residents report riding their bikes on more days in the preceding month than the national sample. On average, Milwaukee residents reported using their bikes on 8.5 of the past 30 days, with males using their bikes on more days (10.5 days) than females (6.4 days). Nationally, the average is 5.0 days for all riders, with males reporting 5.8 days and females reporting 3.9 days on average.



**Figure 8: Days of Bicycle Usage in Last 30 Days**



**Figure 9: Primary Reasons Given for Not Bicycling**

In summary, Milwaukee residents of all ages and sexes appear more likely than Americans in general to bicycle not only during the summer months, but also to bicycle more regularly in general. In addition, among those who ride regularly, Milwaukee residents ride more frequently than their counterparts nationwide.

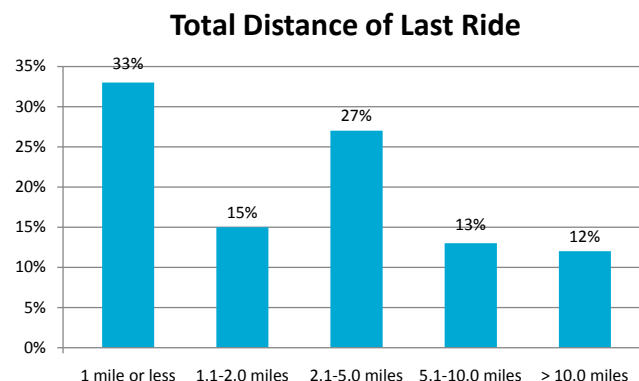
## Reasons for Not Bicycling

Approximately 51% of the Milwaukee respondents reported that they had not ridden a bicycle during the summer and that they had not ridden a bike during the previous 30 days. These respondents were asked to state their main reason for not bicycling. Approximately one-third of respondents reported that they did not have access to a bicycle, while one-quarter of respondents reported that they were too old or had health issues that prevented them from cycling. The remaining respondents were nearly evenly split between not enjoying cycling, preferring to walk or drive, and not having the time or opportunity to ride.

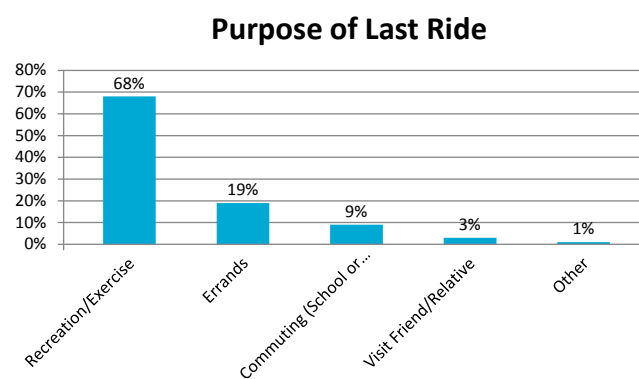
## The Distance, Purpose, and Safety of Bicycle Trips

The majority of bicycle trips in Milwaukee are short: 75% of people reported that their last ride was less than five miles, and one-third which stated their last ride was under a mile. These distances are comparable to the distribution of automobile trip distances.

Over two-thirds of Milwaukee residents reported that the primary purpose for their last ride was recreation or exercise, with just over two-thirds reporting that purpose. Utilitarian trips, such as running errands and commuting to school or work accounted for another 28% of responses by residents.



**Figure 10: Total Distance of Last Ride**



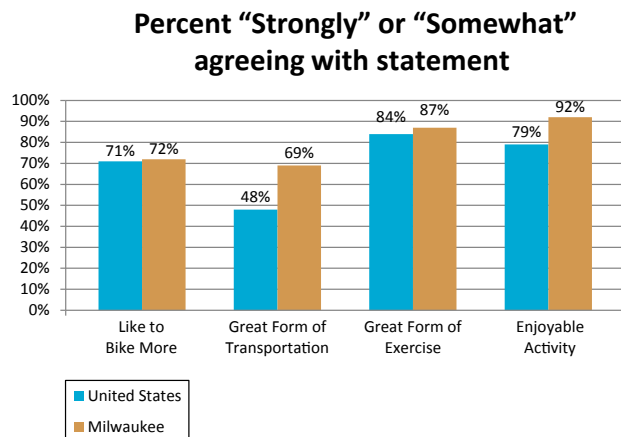
**Figure 11: Purpose Given for Last Bicycle Ride**

One quarter of Milwaukee riders (24.6%) reported that they felt concerned for their personal safety while riding, and of those, 90% cited the behavior of motorists as their reason for concern. Nationally, 13% of riders reported feeling concern for their personal safety, with 88% of those riders citing the behavior of motorists as the reason for their concern. The actions of motorists are clearly the primary concern of bicycle riders nationwide, but a greater percentage of cyclists in Milwaukee have this concern than a similar sample of riders nationwide.

## Opinions on Bicycling and Design of Communities for Safety

Milwaukee residents hold favorable opinions about bicycling. When asked if they agreed with a series of statements about bicycling, they agreed “strongly” or “somewhat” at a higher rate than their peers nationwide. While the responses of Milwaukee residents were similar to their nationwide counterparts on most statements, it is notable that Milwaukee residents agree with the statement “biking is a great form of transportation





**Figure 12: Respondents Agreeing with Positive Statements About Bicycling**

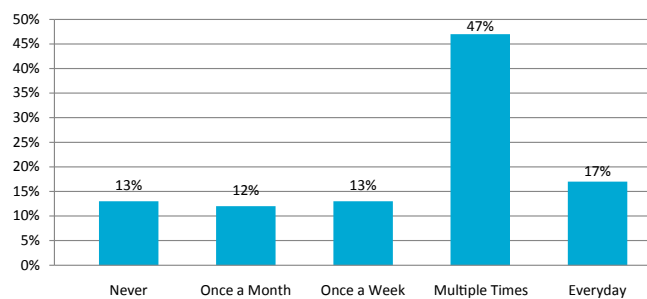
in the area where I live” at a far higher rate than nationwide (69% versus 48%). While this may reflect the fact that urban trips are often shorter than suburban or rural trips, it also reflects a particularly favorable view of the utility of cycling in Milwaukee.

Survey respondents were also asked to rate their satisfaction with “how your local community is designed for making bike riding safe.” Overall, 55% of Milwaukee residents were “very” or “somewhat” satisfied, while 63% of respondents who had ridden a bike in the last 30 days were “very” or “somewhat” satisfied. While these numbers are above the national numbers, they show that there is considerable work to do to ensure that all Milwaukee residents feel safe bicycling around their city.

## Milwaukee Bike Plan Survey

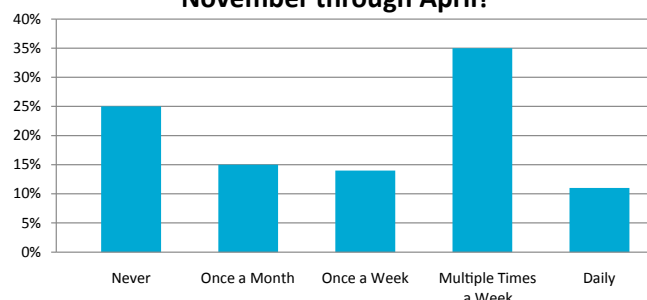
The Milwaukee Bike Plan Survey was an informal qualitative survey targeted at existing cyclists in the Milwaukee area to learn about their opinions about bicycling in Milwaukee. The survey was administered online and was available to anyone, not just Milwaukee residents. Because the survey was heavily promoted within the cycling community and participants were not selected randomly, the opinions collected may not accurately reflect those of all Milwaukee residents as a whole. However, with 689 respondents as of August 31, 2009, the opinions expressed in the survey do reflect a wide cross section of cyclists and other road users in the greater Milwaukee area.

### How Often do you Ride a Bicycle May Through October?



**Figure 13: Frequency of Bicycle Ridership During Warm-Weather Months**

### How Often do you Ride a Bicycle November through April?



**Figure 14: Frequency of Bicycle Ridership During Cold-Weather Months**

## Frequency of Bicycling

As would be expected, respondents to this survey reported higher rates of riding their bikes and a greater frequency of riding than the general public as represented by the MSBAB. Nearly half (47%) of the survey respondents reported that they rode multiple times a week between May and November, and over three quarters (77%) reported riding at least once a week.

This survey also showed that a significant number of cyclists ride year round in Milwaukee. Over one third (35%) of respondents reported riding multiple times a week from October through April, and 60% reported riding at least once a week. Even given the bias of the survey toward frequent cyclists, this demonstrates that a large number of cyclists ride year round in Milwaukee.

Survey respondents reported that they used their bicycles for both transportation and recreation on a regular basis. Just over two thirds (69%) of the respondents reported using their bikes at least once a week for transportation purposes, while 85% reported using their bikes that frequently for recreation or exercise.

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## How often do you use your bicycle for transportation?

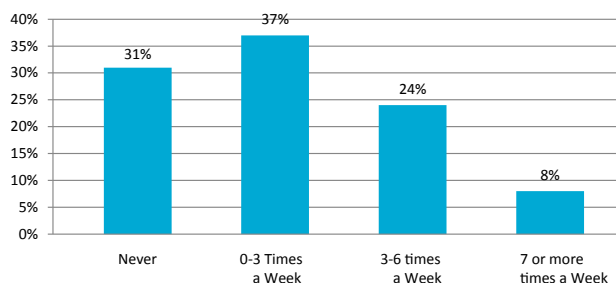


Figure 15: Bicycle Use for Transportation

## How often do you use your bicycle for recreation/exercise?

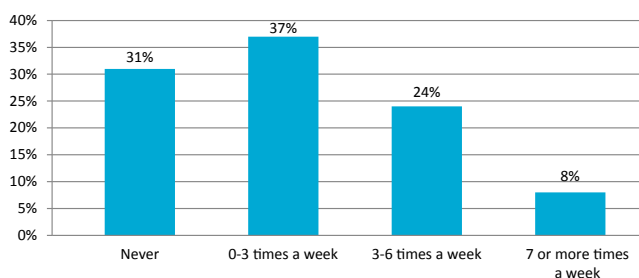


Figure 16: Bicycle Use for Recreation or Exercise

## What's the longest distance you would consider riding a bicycle?

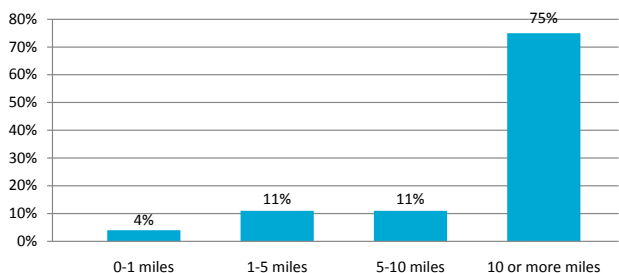


Figure 17: Longest Distance Cyclists Would Consider Riding

Additionally, the survey group reported that they would consider biking significant distances: 75% stated they would consider riding ten or more miles at a time.

## Factors Affecting Bicycling

Survey respondents strongly agree with the Wisconsin law that bicycles are considered legal vehicles on the road and have the same rights and responsibilities as motor vehicles.

## Which statement best describes your feelings about the Wisconsin State Law that bicycles are considered vehicles of the road and have the right to be driven on the street?

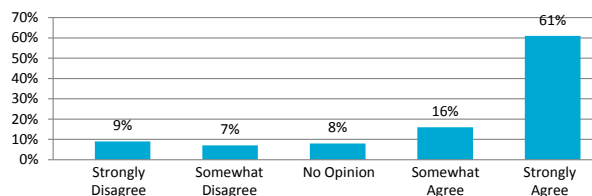


Figure 18: Agreement with State Law Designating Bicycles as Legal Vehicles

## How important is it to you to improve the conditions for bicycling in your community?

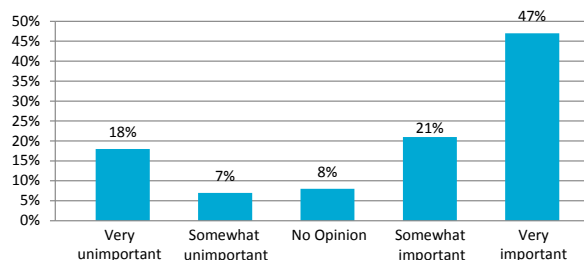


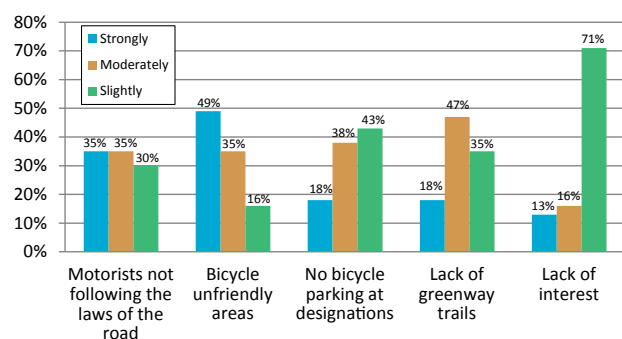
Figure 19: Importance of Improving Bicycling Conditions

Although most survey respondents feel that bicycles should be legally operated in the roadway, they also believe that improvements are needed in conditions for bicycling in their communities. Nearly half of the survey respondents reported that it was “very important” for the community to improve the conditions for cycling. This may imply a strong belief that even though cyclists are legal users of the road, current street design and other facilities are not particularly safe or conducive for cycling.

This is further supported when respondents were asked what factors discourage them from bicycling. Just under half of respondents reported that “unfriendly bicycle roadways” strongly discouraged them from bicycling, while one-third of respondents reported that “motorists not following the laws of the road” strongly discouraged them from bicycling. Not having adequate bicycle parking available at destinations and a lack of off-street greenway trails were also cited as factors discouraging people from bicycling.

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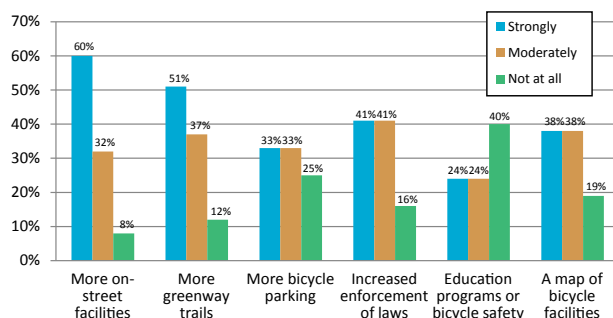
## What factors discourage you from bicycling?



**Figure 20: Factors Discouraging Bicycling**

When asked what factors would affect their decision to bicycle more, respondents strongly supported the addition of more on- and off-street bicycle facilities, including bike lanes and bike paths. 92% of respondents reported that more on-street facilities would strongly or moderately affect their decision to bicycle more, while 88% made the same statement about additional greenway (off-street) trails. Notably, education and outreach efforts as well as increased enforcement of traffic laws would also strongly or moderately affect respondents' decision to bicycle more. This demonstrates that although more bicycle facilities are desired, relatively inexpensive education, enforcement and outreach efforts could also significantly increase the number of people bicycling in Milwaukee.

## Would these factors affect your decision to bicycle more?

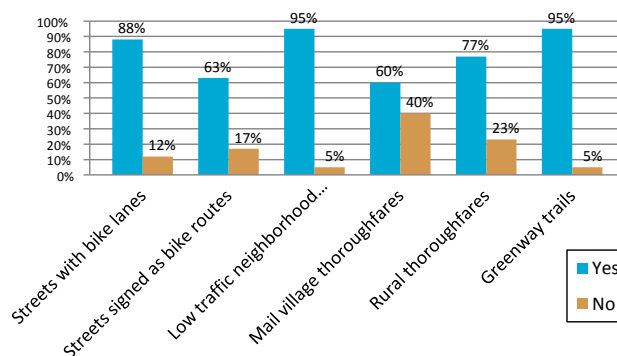


**Figure 21: Factors that Would Encourage More Bicycling**

Logically following the question about the factors that would affect their decision to bicycle more, the vast majority of respondents reported that they felt comfortable riding on designated bicycle facilities including

bike lanes, bike routes and greenway trails. Nearly all respondents also reported they were comfortable riding on low-traffic neighborhood streets like those that make up the majority of the Milwaukee street network. The only facilities that significant numbers of respondents reported not being comfortable bicycling on were main village/city thoroughfares and rural thoroughfares, although in both cases it was still a minority of respondents stating they were not comfortable with such facilities.

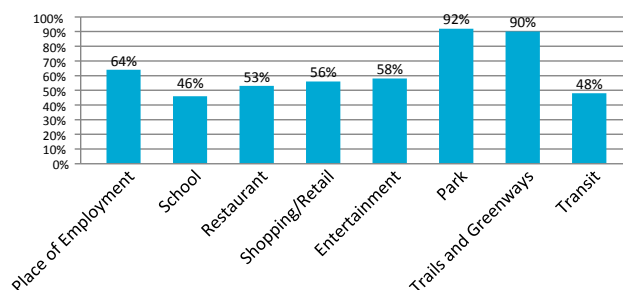
## Where do you feel comfortable bicycling?



**Figure 22: Comfort Level Bicycling on Specific Facilities and Streets**

When asked where they would ride, survey respondents overwhelmingly reported that they would ride to recreational areas such as parks and greenway trails. However, they also reported that they were likely to use their bikes for more utilitarian trips including commuting, connecting with transit, and as transportation to shopping, restaurants and other entertainment venues.

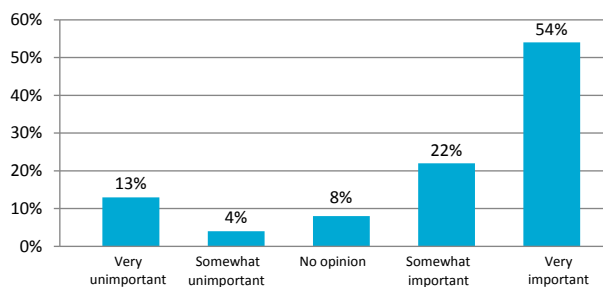
## What destinations would or do you bicycle to?



**Figure 23: Destinations Reached by Bicycle**



**How important do you think it is to include bicycle issues in the City's transportation planning process?**



**Figure 24: Importance of Including Bicycle Planning in Milwaukee Plans**

Given the high rate and frequency of reported bicycling by respondents, it should not be a surprise that a majority (54%) also think that including bicycle issues in the city of Milwaukee's transportation planning process is very important. Fully 76% of respondents feel that such a step is "very" or "somewhat important," while only 17% of respondents felt that it was "unimportant."

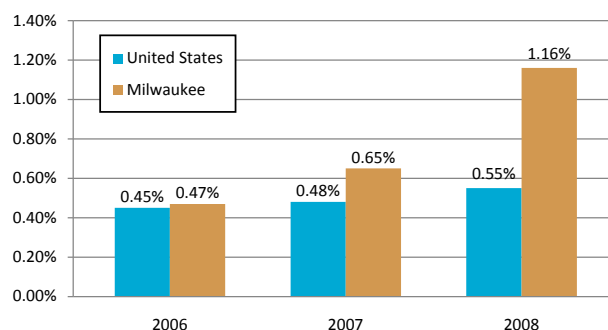
## American Community Survey

The American Community Survey (ACS) is a nationwide survey that collects and produces population and housing information every year instead of every ten years. Approximately three million housing unit addresses are sampled annually throughout the United States and Puerto Rico including nursing homes, correctional facilities, military barracks and college/university housing.

Beginning with the 2005 ACS, and continuing every year thereafter, annual estimates of demographic, social, economic and housing characteristics are available for geographic areas with a population of 65,000 or more. This includes the nation, all fifty states, the District of Columbia, all congressional districts, approximately 800 counties, and 500 metropolitan and micropolitan statistical areas.

In 2008, the ACS released its first multi-year estimates based on ACS data collected from 2005 through 2007. These three-year estimates of demographic, social, economic and housing characteristics are available for geographic areas with a population of 20,000 or more. For areas with a population of less than 20,000, five-year estimates will be available. The first five-year estimates, based on ACS data collected from 2005 through 2009, will be released in 2010.

**Use of bicycle as means of transportation to work**



**Figure 25: Bicycle Use as Means of Transportation to Work**

The portion of the ACS most relevant to bicycle planning in Milwaukee is the section surveying participants on their mode of travel to work. Because the survey uses statistical sampling to estimate totals for the entire population, there is a significant margin of error for responses. However, the survey and its sampling methods remain consistent from one year to the next and across surveyed regions, which means that the data are useful for trend analysis and comparison to other regions.

Information on the methods and procedures of the ACS is presented in ACS Design and Methodology. <http://www.census.gov/acs/www/Downloads/tp67.pdf>

## Milwaukee Bicycle Commute Mode Share

According to the ACS, the use of bicycles for commuting to work has risen significantly over the past few years. In 2006, 1,154 people commuted to work by bicycle; representing 0.47% of all trips to work. By 2008, the number of people commuting by bicycle was 2,809, or 1.16% of all commuters. This gain represented a 143% gain in only two years. Notably, the bicycle facility network did not dramatically increase during that time.

It is also notable that in 2006, Milwaukee had a bicycle mode share that was virtually identical to the national average. However, in 2008, the Milwaukee bicycle mode share was more than double the national average.

## Conclusion

The three surveys about bicycling in Milwaukee demonstrate that there is strong interest in bicycling and in improving conditions for biking throughout the city. Milwaukee has consistently higher bicycling rates than the national average, and these numbers could be increased through a concerted effort to improve bicycling conditions. While some of these efforts are relatively expensive infrastructure projects, others are simple enforcement and education efforts targeted at both motorists and bicyclists. By providing better bicycling facilities including on-street lanes and routes, off-street paths, and adequate parking, in addition to stepping up traffic enforcement laws and working to educate motorists and bicyclists about appropriate and safe road behavior, the city stands to increase the number of bicyclists significantly.